

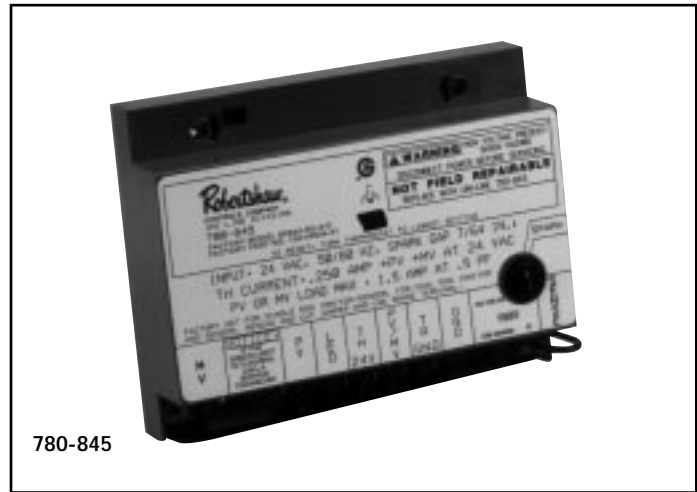
Robertshaw® GAS IGNITION CONTROLS

780-845 24 VAC INTERMITTENT PILOT IGNITION CONTROLS

When the thermostat calls for heat, the 780-845 control simultaneously initiates ignition sparking and opens the pilot valve portion of the gas valve. Pilot flame recognition stops ignition sparking and opens the main valve portion of the gas valve. Pilot burner flame is continuously monitored at a synchronous frequency for the duration of the heating cycle. Should the pilot flame fail during the heating cycle, the control will shut off the main valve until the pilot flame is established.

The 780-845 lockout ignition control provides 90 seconds of spark, followed by a 6 minute time delay (purge) between ignition attempts. After three tries, if no pilot flame is sensed, the control goes into a **one-hour** lockout period. At the end of the lockout period, if the demand for heat is still present, the unit will repeat the three tries for ignition.

NOTE: During lockout, you may override the auto-system, and manually reset the unit at the thermostat.



780-845

NOTE: The green diagnostic LED will be on continuously for normal operation. The LED will be off for internal lockout and will flash continuously for problems external to the control (ie. not sensing flame).

780-845 SPECIFICATIONS

Input Voltage	24 VAC to 50/60 Hz
Transformer	24 VAC / 20 VA
Safety lockout timing	90 seconds
Spark rate	4 to 15 sparks per second
Relay contact ratings	
Pilot valve	1 amp at .5 PF
Main valve	1 amp at .5 PF
Combined load	1.5 at .4 PF
Flame sense current	.7 μ A DC @ 25°C / 24 VAC
Maximum total current load	1.5 amp
Flame failure reignition time	2 seconds maximum
Ambient temperature rating	-40 to 175° (-40 to 80°C)
Relative humidity	95% noncondensing at 104°F

Identifying Your Robertshaw ICU Terminals

MV	Main valve
PV	Pilot valve
LED	Diagnostic LED
TH	24V thermostat
PV-MV	Gas valve common
TR	Transformer ground
GND	Main Burner Ground
SENSE	Internal/external sense terminal
SPARK	Spark output